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(54) Title: ETCHING OF ALGAINASSB

(57) Abstract: The present invention relates to a wet acid etchant for wet acid etching of intrinsic, n-doped or p-doped Al_{1-x}. _zGa_xIn_zAs_{1-y}Sb_y with 0<x<1, 0<y<1, 0≤z<1 and 0<x+z<1, a process for wet acid etching of intrinsic, n-doped or p-doped Al_{1-x}-_zGa_xIn_zAs_{1-y} Sb_y with 0<x<1, 0<y<1, 0≤z<1 and 0<x+z<1, and a semiconductor structure prepared by wet acid etching of Al_{1-x}. $_zGa_xIn_zAs_{1-y}Sb_y$ with 0 < x < 1, 0 < y < 1, $0 \le z < 1$ and 0 < x + z < 1. The etchant comprises: organic acid; oxidizing agent; hydrofluoric acid.

